



THOMAS G. NEWMAN,
EDITOR.

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EDITORIAL BUZZINGS.

The Columbus Convention has monopolized a large space in this issue of the BEE JOURNAL. Next week we hope to give the remaining portion. In order to do this we omit the Queries and nearly all the correspondence. As that convention presents the *newest* matter for the craft in America, we must give it in time to be *fresh* as well as *seasonable*.

The Alabama State Fair occurs at Montgomery on Oct. 22, and in the Bee and Honey Department the premiums amount to \$68, besides diplomas. Capt. W. H. Black makes an exhibit there. His 16 colonies last spring have increased to 38, besides giving over 1,000 pounds of surplus honey in one-pound sections. That is a little over 62 pounds per colony, spring count. That is a report not to be ashamed of in this exceedingly poor season!

On Mountain Sides.—A California paper thus moralizes over the fruit-bees controversy and its results :

The irrepressible conflict between fruit-grower and apiarist has ended in the latter fleeing to the mountains, taking the little busy bees to gather the nectar from the delicious mountain flowers. The orchardist charged that the bees punctured the ripening fruit with their lancet tongues, and while the bee-master knew this to be an error, he had no choice but to go among the hills where fruit-growing is not yet a leading industry.

Nay! Rather say that the rich mountain flowers have enticed the bee-keepers to the delicious bee-pasturage provided by Nature away up the mountain sides, leaving the valleys to the raisin-growers—thus solving the problem to the advantage of both the fruit-growers and bee-men. How much better to have it so, than to quarrel over it.

Bulletin No. 39, issued by the Agricultural College of Michigan, on Sept. 1, 1888, contains "experiments with insecticides," by Prof. A. J. Cook (who is well-known to our readers), having charge of the Department of Zoology and Entomology at the College. The experiments were made for the purpose of destroying the Codling Moths, Curculio, Ants, and other insects. The Bulletin also gives valuable information concerning the planting of trees, etc., and advises the planting of Linden trees instead of Maples and Locusts, which are so susceptible to injury. He says:

Our American linden or basswood is a tree of rare beauty, and a more vigorous and rapid grower than either maple or elm. It is attacked very rarely by insects, and so far as I have observed I should say that ten transplanted basswoods live and thrive to one of maple. Last but not least, the linden is a very valuable honey-tree, as the honey from basswood is usually very plenteous and of most excellent quality, as we should expect from the delicious fragrance of the beautiful flowers. When we plant a linden, then, we are adorning our street or grounds, with a tree that will very likely live and thrive, a tree that will surprise us with its rapid growth and development, and a tree that will bless the coming generation with the valuable product which it so bountifully yields. I believe there is no native deciduous tree that offers such inducements for transplanting as does the American linden.

Unless we conclude then to plant lindens exclusively, and such a course has much to recommend it, I should say plant all our beautiful trees: linden, maple, elm, oak, tulip, chestnut, ash, willow and even poplar, then, as with the man who practices mixed husbandry, and like the maid who divides her eggs among several baskets, we shall be almost sure to win at some point, and not to lose in all.

If it is thought that trees of one kind when planted in a single or double straight row look the best, then I say plant linden. If we plant irregularly, and pay some heed to grouping, which I have done, we can then plant all kinds of trees with excellent effect. Were it not for the inconvenience of this style of planting, when we come to use our mowers to cut the grass along the way side, I should certainly advise this irregular planting and grouping. Owing to the enhanced beauty, I prefer it even with the inconvenience thrown in.

To conclude, I say then, either plant lindens or else all our desirable native species. If we must set maples, then practice great care that we may resist the borers and save our trees.

Some Texas Honey-Plants.—J. C. Bell, Belton, Tex., on Sept. 29, 1888, writes :

As requested on page 620, I have sent Prof. Burrill three stalks or stems with flowers for name. The old stalk came up from an old root that lives through the winter. The two tender stalks came from the same root after the August rains. The second crop does not secrete honey as well as the first. I also sent one white bloom for name that is very fine for bees; it grows wild here, and blooms the second time when it rains in the summer.

[The plant sent by Mr. Bell sometime ago proves to be *Salvia azurea*, variety *grandiflora*, occurring from Kansas well southward in Texas. The determination has been made from some specimens recently received direct from Mr. Bell. Like all the

sages, this plant is a good honey-producer. Another plant sent by the same person is the prickly poppy—*Argemone platyceras*—not known to be specially useful for honey.—T. J. BURRILL.]

What a Commission Merchant Has to Say About Honey.—In conversation with J. T. Carson, a commission merchant of Louisville, Ky., last week, some points of special value to bee-keepers were brought out. He reports the honey crop unusually short so far as his information goes, and he usually handles quite large quantities. Comb honey sells in Louisville much more rapidly than extracted, and that in one-pound sections much better than that put up in larger packages.

Bee-keepers should be careful to not leave honey on the hives until it gets a yellowish cast, as that which is the whitest and cleanest sells first.

Shipping crates for comb honey should have glass at one end, but do not need it on two ends or two sides, as one side is just as good, and there is less liability of breakage.

Mr. Carson has all his honey shipped by freight, as express companies not only charge more, but their agents are so often hurried that it is not handled as safely as by the freight hands. A large shipment of comb honey put up in an unsalable shape hung on the Louisville market for over a year, while that put up neatly in one-pound sections found ready sale.

Good comb honey could be sold in Louisville at 20 cents less 5 per cent. commission and freight. As the honey crop has been very light, those who have any may expect good prices and prompt returns.—*Indiana Farmer*.

A Trusty Guide.—Under this heading the *Prairie Farmer* gives Prof. Cook's new "Manual" the following superb notice, which we most fully endorse :

A new edition of the "Bee-Keepers' Guide, or Manual of the Apiary," is on our desk. This is the fifteenth thousand of the deservedly popular Guide of the Professor. Let none fear to trust this guide up the steep and rugged paths of bee-keeping, for it will ultimately land them on the summit of success. His feet are freshly shod, his Alpine-stock newly pointed, and you can lean on his arm with safety. On the way, with magnifying glass in hand, he will show you the wonderful mechanism of this useful insect; its tongue, which does not talk, but laps and sucks up the nectar into its haversack, and its many-jointed legs, which gather and carry the pollen. This Apian way is bordered with many beautiful flowers, for which the bee acts as marriage-priest, and they are fully described and illustrated. Let all who can, take a trip with this Guide, for they will remember the pleasant "outing" many years to come.

Mr. T. B. Blow will only visit bee-keepers who may invite him to do so—he will not thrust himself upon them. If any wish to have such a visitor, they may send the invitation to this office. We expect him to call here within a few days.

GLEAMS OF NEWS.

Rhode Island State Fair.—In the Providence Evening *Telegram* we notice the following as the awards in the department of "bees, honey and wax":

The judge of this department was L. C. Root.

Awards—S. A. Dexter, Providence, comb honey, third; Samuel W. Lewis, Olneyville, package of comb honey, first; liquid extracted honey, second; extracted honey, third; granulated extracted honey in glass, first; 10 pounds of wax, second.

A. C. Miller, Drownville, 10 pounds of comb honey, second; 10 pounds of liquid extracted honey, second; display of drones, third; hatching queen-cells with bees, second; complete hive for comb honey, second; complete hive for extracted honey, second; thin foundation for honey boxes, first.

Samuel Cushman, Pawtucket, comb honey, first; assortment of comb honey, first; one pound of comb honey, second; display of comb honey, first; 200 pounds of extracted honey, first; 10 pounds of the same, first; variety of extracted honey, first; package of the same, first; drones, workers, etc., first; hatching queens in cells, third; display of queens, first; hatching colony, first; hive for comb honey, first; hive for extracted honey, first; extracted honey, first; display of apiary improvements, second; largest exhibit, first.

Mrs. S. M. Lackey, Providence, 200 pounds of extracted honey, third; variety of extracted honey, second; beeswax, first; drones, queens, etc., second; hatching cells, second; display of queens, etc., second; hive of comb honey, third; hive of extracted honey, third; honey extractor, second; 10 pounds of comb for brood, first.

Judge L. C. Root makes the following report on this department:

The bee-keepers of Rhode Island have reason to be proud of their exhibition in this department. While they all rank well, I should be unjust to myself, to the society and to the bee-keepers of Rhode Island if I did not express my personal gratification at the marked standard of excellence to which Mr. Samuel Cushman, of Pawtucket, has attained as manifested in his exhibit. In the average of his exhibits I observed a most marked degree of neatness, attractiveness and mechanical skill which is the very foundation of success in our business.

A New Enemy.—In the new entomological periodical published by the Government at Washington, D. C., entitled *Insect Life*, No. 3 for September, 1888, we notice the following under the caption of "A New Enemy to Honey-Bees," which is worth making a note of. It reads as follows:

Several predaceous bugs have been recorded from time to time as feeding upon honey-bees, and in Bulletin 12 of this division (page 44) we mention the fact that the common wheel bug (*Priocnides cristatus*) was in the habit of lurking about the hives and preying upon the bees at Winchester, Va. Last summer we received information from Mr. J. W. Lanford, of Lawrence County, S. C., that another bug had been captured by him in the act of piercing the honey-bee, and that his neighbors had noticed the same insect lurking about their hives. The specimen captured in the act was forwarded to us, and proved to be *Euthyrhynchus floridanus*, a species which is rather common throughout the South.

Postal Reform.—*Farm Life* comments thus on this matter: "The Senate Committee to whom was referred the bill reducing the postage on fourth-class matter from 16 to 8 cents per pound, have reported favorably, giving the reasons why the change is advisable. The objection that the lower rate would lessen the revenue is clearly shown to have no foundation. While *Farm Life* is in favor of the 4 cent rate, it may be that a trial of the 8 cent rate will better prepare the way for the adoption of the desired reform. The arguments now used by the Senate Committee will be found equally effective in a year or two for the lower rate. Four cents a pound for merchandise, and one cent an ounce for letters are the rates demanded by the people, and these they are certain to have before the agitation ends. We append a small part of the Senate report:

On the present estimated volume of fourth class matter (excluding seeds, etc.), the immediate loss by the proposed reduction of the rate would fall considerably short of \$1,000,000 annually, a sum that seems insignificant in the present magnitude of the postal revenue. The stimulus of a lower rate would, however, greatly augment the number of parcels mailed, bringing a corresponding increase of revenue. Moreover, the carriage of fourth-class matter incidentally involves much extra revenue, through circulars, money-orders, postal notes, registered letters, and ordinary written correspondence connected with the transactions; and this extra revenue, arising almost wholly from exceedingly profitable sources, would increase just in proportion to the increase of fourth-class matter. It may well be doubted, therefore, whether there would be any decrease of revenue from this source at the very outset, and in the end there would surely be a very large increase.

The measure would not involve a proportionate outlay, since usually merchandise is carried within restricted areas, and to a large degree over "star routes," the cost of which is not sensibly affected by the weight of the mails.

"The United States, while having the cheapest letter and newspaper postage, and in many respects the best postal service of any country in the world, is far behind nearly every other leading government in providing facilities for the carriage of merchandise and miscellaneous articles in the mails.

"We are almost alone in being without the parcels post system, which has become a marked feature in the postal establishments of other countries. Under this system, merchandise and other matter of almost every description are carried in the mails at a small fraction of the charge, and in quantities greatly in excess of that allowed on fourth-class matter in this country. The present charge of 16 cents a pound is prohibitory in its effects, often compelling people to deny themselves of small articles, whether of necessity or comfort, which they cannot procure otherwise than through the mails. The hardship falls most heavily upon those living in the rural districts, where the home markets are scantily supplied, and where the usual means of private transportation do not exist."

Fall Flowers and Honey.—Mrs. L. Harrison, in the *Prairie Farmer* for last week, thus speaks of the fall flowers, prairies and fall honey of Illinois:

The hope so fondly cherished, that fall flowers would yield sufficient honey for winter stores, has been realized. In a letter before me from a lady bee-keeper of South Evanston, Ills., is the following: "I shall not have to do any feeding; the hives are loaded in the brood-chamber, yes, crowded with honey; and the queens have been making up the time they lost in the spring. If honey and young bees will insure good wintering, I ought not to lose any."

On the prairies, where corn and sky meet, and wet places are tile drained, there may not be a sufficiency of fall bloom to yield honey for the support of the bees during the coming winter. Timber-lands, and those along water-courses, subject to overflow, where Spanish-needles and motherwort flourish, are the best bee-pastures in fall.

I am an old settler of the State of Illinois; came here in 1836, and have lived here and in the vicinity ever since. I was born in Ohio, and it is a good State to be born in, if one only emigrates soon enough, as I did, in time to enjoy the beautiful prairies in their pristine loveliness. On these meadows roses, lilies, Indian pinks and lady-slippers, with many more, budded and blossomed and nodded in the breeze, with no fear that the cruel reaper would cut them down. There were two kinds of lady-slippers, yellow and delicate pink-and-white ones. I have not seen one for years, but it would give me more pleasure to see one than the rarest exotic.

An old settler of this county said that he was like the mountain that said to Mahomet, "I cannot come to you, so you must come to me," and invited the old settlers to picnic on his grounds. More than one hundred responded to the call, and on the way thither on the cars, some remarked: "I rode over this ground when there was not a single house." And now, what a change! Farm houses and towns. My old friends, the prairie flowers, had given place to corn and stubble-fields; the plow, reaper and mower had ruthlessly cut them down, and they waved there no more. The cabin, lyre-hopper and old bee-gum have disappeared, and large, commodious farm-houses occupy their sites. In lieu of the buzzing of the wheel, the note of the organ and the whirr of the sewing-machine are heard. The sound of the flail is heard no more in the land, nor the tread of horses on the ground threshing-floor, but instead there falls on the ear the whirr of the steam-thresher, as the stream of clean grain runs into a sack, while the clean, bright straw is deposited on the stack.

There are some "old settlers" among the flowers yet remaining, that the reaper and plow have not destroyed. Golden-rods and asters have taken up their abode under the protection of hedges, fences, and rough, untilled land. Tile drove them from wet places, and now they are on the ragged-edge. May the day be far distant when they are driven from the highways and fences!

The Credit Belongs to the Bees.

—Farmers say that honey is their only product that is free from vermin. Let due credit be given the bees for this. They certainly take great pains to "comb" it.—*Binghamton Republican*.

We will Present a Pocket Dictionary for two subscribers with \$2.00. It is always useful to have a dictionary at hand to decide as to the spelling of words, and to determine their meaning.

**CONVENTION
NOTES**

INTERNATIONAL.

Report of the North American Bee-Keepers' Convention.

Written for the American Bee Journal
BY W. Z. HUTCHINSON.

The North American Bee-Keepers' Society convened its Nineteenth Annual Convention on Oct. 3, 1888, in the Representative Hall, at the State House in Columbus, Ohio.

The meeting was called to order at 11 a.m., with President A. B. Mason in the chair. As no programme had been prepared, a committee was appointed to prepare one. The following members then paid their dues :

J. S. Barb, Bristolville, O.
J. A. Bayard, Athens, O.
E. M. Bennett, South Charlestown, O.
Dr. H. Besse, Delaware, O.
J. H. Boyden, Saline, Mich.
Jno. Calvert, Medina, O.
Asher M. Coe, Coe Ridge, O.
E. H. Collins, Mattsville, Ind.
Prof. A. J. Cook, Agricultural Coll., Mich.
J. Y. Detwiler, New Smyrna, Fla.
W. J. Dixon, Monday, O.
G. M. Doolittle, Borodino, N. Y.
Frank A. Eaton, Bluffton, O.
Henry Hastings, Kenton, O.
B. Helfphy, Utica, O.
R. F. Holtermann, Brantford, Ont.
Marcus Holtz, Tiffin, O.
W. Z. Hutchinson, Flint, Mich.
C. E. Jones, Delaware, O.
D. B. Lovett, Crestline, O.
David Lucas, Jewett, O.
Dr. A. B. Mason, Auburndale, O.
N. W. McLain, Hinsdale, Ills.
J. J. McWhorter, South Lyons, Mich.
Dr. C. C. Miller, Marenzo, Ills.
F. Minnick, Bessemer, Wis.
J. F. Moore, Rockaway, O.
S. R. Morris, Bloomsburg, O.
Adam Rickenbacher, Gahanna, O.
A. I. Root, Medina, O.
E. R. Root, Medina, O.
R. R. Ryan, Bradshaw, Nebr.
Jno. Short, Moline, Mich.
J. H. Smith, Kenton, O.
R. L. Taylor, Lapeer, Mich.
Dr. G. L. Tinker, New Philadelphia, O.
Samuel Utz, Kenton, O.
P. S. Van Rensseler, La Crosse, O.
G. W. Webster, Lake Helen, Fla.
B. Wells, Fostoria, O.
Robt. B. Woodward, Somerset, O.
S. P. Yoder, East Lewistown, O.

LIFE MEMBER.
Thomas G. Newman, Chicago, Ills.

LADY MEMBERS.
Miss Dema Bennett, Bedford, O.
Mrs. Prof. Cook, Agricultural Coll., Mich.
Mrs. M. George, Bowling Green, O.
Mrs. D. B. Lovett, Crestline, O.
Mrs. A. B. Mason, Auburndale, O.
Mrs. Mary McPherson, Ohio.
Mrs. E. R. Palmer, Exeter, Mich.
Miss Kate Perkins, Flushing, O.
Mrs. E. R. Root, Medina, O.
Mrs. M. Stover, Roscoe, O.
Mrs. Catherine Springer, Fostoria, O.
Miss Mary Statelar, Somerford, O.
Miss Sarah Statelar, Somerford, O.

After the members had paid their dues, the remainder of the forenoon was employed in what might be called

An Experience Meeting.

Miss Dema Bennett had received many reports, and nearly all reported failure. A few had reported getting 100 pounds per colony from pepperage.

Dr. Tinker reported almost no honey from white clover. The greatest yield had been from yellow poplar. The honey from this source is dark, and many mistake it for honey-dew.

Prof. Cook stated that he had received some heart's-ease honey from Iowa. When first received it was very strong in flavor. No one would want it upon the table. In three or four weeks the strong flavor had passed away.

R. L. Taylor said—My story is like that of the other members. My crop is about 5 pounds of surplus per colony. My bees are in two apiaries nine miles apart. All the white honey was secured in one locality, and all the fall honey in the other. In the northern part of the county the fall flow was bountiful. If I had moved my bees 20 miles I might have secured from 25,000 to 40,000 pounds of surplus. This honey that was secured in the northern part of the county was almost as white as my clover honey. I think it came from asters and button-ball. The flavor is good; it reminds me of fine maple syrup.

R. F. Holtermann reported that bees wintered poorly in Canada. Clover and linden yielded but lightly. But very little comb honey had been taken, and the extracted would all be off the markets in October. The fall flow had been fair. In localities the flow from thistle had been good.

Mrs. Mary McPherson made her living by keeping bees, poultry, etc. She had learned the business under protest. Her husband had told her that she might sometime be left to support herself and children. His words had proved true. Last season she was left a widow. From 32 colonies she had secured 800 pounds of comb honey. She did all the work, besides caring for her poultry and doing her house-work. She was up in the morning as soon as it was light enough to see, and she said she would like to have a private settlement with the man who said bee-keeping was nice and easy work—just suited to ladies.

J. Y. Detwiler rehearsed the troubles that had befallen the bee-keepers of Florida. The frost of 1886 had injured the mangrove. It had recovered in a measure, and was beginning to yield. This year he had 1,200 pounds from 40 colonies. Large black ants

give much trouble. They work at night, and sometimes destroy full colonies. Mr. Detwiler preferred to keep bees in the North, even with the risks of wintering, to keeping them in Florida; but he liked the climate of Florida, his home is there, and he should stay.

The convention then adjourned until 2 p.m.

AFTERNOON SESSION.

The afternoon session was called to order at 2 p.m. by President Mason.

Reunion Song.

We naturally feel a little pride in the fact that when we need poetry, songs or music it is not necessary to leave our ranks in search of the talent necessary for their manufacture. The afternoon session was opened by singing "The Bee-Keepers' Reunion Song"—the words by Eugene Secor, and the music by Dr. C. C. Miller. Many of the members joined in the singing, and all were pleased with the sentiments expressed, as well as with the music.

After the singing the convention took up for discussion this subject:

The Best Age of Bees to Go into Winter Quarters.

Dr. G. L. Tinker preferred young bees; those that had had one flight. He would put the bees in as early as Nov. 10, as they are then likely to become quiet and remain so. As an experiment he had taken some of the bees out of the cellar, and allowed them to fly, then returned them to the cellar, and as a result they became restless and wintered very poorly.

Dr. C. C. Miller—I suppose that if we should try to find out what class of the human family suffered most in a severe winter, we would learn that it was the old folks and the children. I do not know as I disagree with Dr. Tinker. I am not sure, however, that I want very young bees. In the fall we have all ages of bees in the hives. Some of them will die within a week, others in two weeks, others in a month, and so on. If it were possible, I believe it would be an advantage to have sifted out all the bees that would die before spring.

R. L. Taylor—I would like to ask at what time the Doctor would have the queen stop laying?

Dr. C. C. Miller—We have but little control over this. We might prolong breeding by feeding.

R. L. Taylor—one year I fed the bees in the fall. October was warm, there was brood in the hives early in November, and the young bees certainly did no harm, as the bees wintered unusually well.

A. I. Root—We were once told that we must have young bees for winter—must feed if necessary. We tried taking away the queen in the fall, but the bees wintered well.

Prof. Cook would not care to have the queen lay after Sept. 1.

E. R. Root—In 1886-87 we wintered 200 colonies without loss, and they were almost all old bees; we had foul brood in the apiary, and but little brood was reared.

Dr. A. B. Mason preferred bees that had done a little work before winter had begun.

Prof. A. J. Cook—I think that we ought to have brood up to September. In 1871 we had no brood in July and August, and the bees wintered poorly. I do not care to have the bees begin to breed before the first of April.

R. L. Taylor—I do not want my bees to breed in the cellar. One year, towards spring, I found a colony in the cellar that had one comb full of brood. I was pleased with it. I kept watch of it. When put out, the bees seemed to lose heart. They did not go ahead and prosper. Other colonies that did not breed until taken from the cellar outstripped this one.

There was quite a long discussion as to how early in the spring it was best for bees to begin breeding. Some said two months before the white clover harvest was soon enough, and others would have them begin sooner.

Upon a vote being taken, it was found that the convention was about equally divided. One-half thought that two months before white clover was soon enough, and the other half preferred to have them commence sooner.

The convention next listened to the reading of an essay by Prof. G. W. Webster, of Lake Helen, Fla., upon

The Honey-Plants of Florida.

Probably no State in the Union presents such a variety of soil and vegetable production, and consequently of bee-forage as Florida. Here in Volusia county, in what is generally called South Florida, there are at least seven distinct classes of land, each class having its own peculiar flora. These classes are commonly distinguished as High Hammock, Low Hammock, High Pine, Low Pine (or Flatwoods), Scrub, Cypress Swamps, and the Mangrove Islands.

A narrow strip of hammock along the St. John's river, a wider one running north and south along the coast, and a few small bodies scattered through the county, comprise the hammock land. The largest portion of high pine land is a strip 5 to 10 miles wide running north and south through the county, and near the St. John's river.

Between the high pine land and the hammock along the coast, there is a strip of low pine land 10 to 15 miles wide.

Scrub lands are scattered about in various parts of the county, sometimes several thousand acres in a body. Small bodies of cypress swamp are to be found in nearly all parts of the county. The Mangrove islands are found in the salt water of the Indian and Hillsborough rivers, along the coast. Hammock lands furnish bee-forage from cabbage and saw-palmetto, yellow jasmine, grapevines, and many other vines and shrubs. High pine furnishes almost nothing except where it is cultivated in orange groves, or other crops. Cow-peas keep bees busy during a part of the season, and the wild partridge-pea (*Cassia chamaecrista*) is said to be a good honey-plant; and sometimes Pelastemon Feazi is said to yield honey.

Cypress swamps are mostly located in the "low pine" lands, and furnish nothing that I know of except where there are whortleberries or ilex growing around their borders. Flatwoods are covered with large quantities of saw-palmetto, which is the best honey-plant in Florida, aside from the mangrove. *Ilex glaber*, a species of holly, with black berries, commonly called gailberry, is found along the borders of streams, lakes and swamps. It does not grow in sufficient quantities to yield a large amount of honey, but we sometimes get a flow of it just before the palmetto, and it produces a little better quality of honey.

Scrub yields a good quality of honey from the scrub or spruce pine, and a poor quality from a shrub called, sometimes, crooked-wood (*Andromeda ferruginea*). Palmetto is also found in the scrub, as well as whortleberries, red-bay, and some other shrubs that help a little. The orange yields abundantly, and the honey is of fair flavor. Settlements are mostly on high pine and hammock land, which would consequently locate the orange groves there also.

Our own apiary of about 40 colonies is located on high pine land. Our first surplus honey is from the spruce pine in January or February. In February or March comes the orange, and in April the andromeda. Two or three weeks later, in May, comes our best yield from gallberry and palmetto, which closes the season so far as surplus is concerned. In fact it is necessary to leave 25 or 30 pounds of honey in each hive when taking the last honey in June. Otherwise the bees are liable to need feeding during the fall or early winter, and in my opinion feeding does not pay in the pine woods of Florida.

During the summer and early autumn sufficient honey is gathered to keep up breeding, but by November surplus honey is generally considerably diminished. One common cause of loss of colonies here is undoubtedly lack of stores; another cause is the loss of queens in swarming time, many young queens being lost before they get to laying. During April and May the green dragon-fly is very destructive to bees; sometimes hundreds of them may be seen around the apiary, darting in every direction, seizing the bees as they return heavily laden, and devouring them at their leisure, as they fly about; and no doubt they get many young queens during their mating flight.

There is about as much trouble in wintering bees here as there is in the Northern States, owing, I think, to the many mild days during the winter, which tempt bees abroad when there is nothing for them to get. The bees become chilled or worn out, and fail to return. Our experience here has been a yield from 40 to 50 pounds of extracted honey per colony, the seasons varying as they are cold or warm, wet or dry.

Mangrove Region of Florida.

Bee-keeping near the coast, in the mangrove region, is entirely a different affair, and requires different methods. Before the great freeze of three years ago, very large yields were sometimes obtained. Several bee-keepers reported a yield of over 300 pounds each from their best colonies; and sometimes whole apiaries yielded an average of over 200 pounds per colony. The freeze killed much of the mangrove, and there are probably not over one-fourth of the bees there now that were there then.

The mangrove is slowly recovering from the effects of the freeze, and during the past season some apiaries have done fairly well. The great trouble seems to be in wintering the bees so as to have plenty of workers when the mangrove is in blossom, which is not generally before the middle of June, and lasts until sometime in August. Where there are many large apiaries the yield of honey from palmetto, orange groves and the hammock lands is not sufficient to keep the bees breeding during the late winter and spring.

One man, who was taking care of about 100 colonies, told me that he thought 60 pounds of honey should be left in the hive to winter on. It was then the last week in April, and he said that he had already fed five barrels of sugar. In March his bees had got well advanced in brood-rearing, on orange blossoms and yaupon (*Ilex cassine*), but in April the honey failed,

and the bees carried out large quantities of young brood. While we were talking we could hear the bees working on the two or three species of wild grape that were just coming into blossom in the hammock. I also noticed bees very busy on *Ilex decidua* and *Eugenia dichotoma*, two shrubs or small trees that are plentiful in places near the coast.

About the same time I visited two apiaries belonging to J. Y. Detwiler—one at his home on the east side of the Hillsborough river, opposite New Smyrna, and the other on Orange Island, 12 or 14 miles further south. His home apiary did not seem to be doing much, there being but little hammock within reach of it, but the one on Orange Island, having access to plenty of hammock, were rearing brood and storing honey. He had not fed either apiary except perhaps to give weak colonies frames of honey from the strong ones.

I spent several weeks on the Hillsborough river in June and July, and visited the apiaries of Mr. Detwiler, the Messrs. Brown on the east side of the river, W. S. Hart (in charge of E. S. Contant) at Hawk's Park, A. E. Marsh, near Oak Hill, and others. Two story hives were generally used, and so far as I learned, no honey was extracted from the lower story, and it seemed to be the general opinion that both stories should be left full of sealed honey for winter use.

I think that the palmetto yield must have been much shortened the past season by dry weather, and the mangrove itself, although its roots stand in water, and are washed by the tide every day, seems to need rain in order to produce a good yield. I heard bee-keepers complaining that they were getting little honey on account of the dry weather, while only a few miles distant, others who had been in the track of storms, were getting a good flow. The best yield heard of was 150 or 160 pounds per colony. Some got but very little. One man said that he fed two barrels of sugar and one-half a barrel of honey, and extracted two and one-half barrels of honey. Difference in location, rainfall, condition of bees, and I have no doubt in management, all conspire to make a difference in results.

I have no doubt that large quantities of honey will be produced from the mangrove, but it will be done by acquired skill and untiring perseverance.

Further south *Satureia rigida*, commonly called wild penny-royal, is said to be a very superior honey-plant, blossoming during the winter. I have collected specimens of it within less than two miles of our own apiary,

where it blossoms in April, but not in sufficient quantities to yield much honey.

The Grading of Florida Honey.

I wish to speak in regard to the grading of Florida honey. Some dealers still unjustly class it as "Southern honey," a name that has been applied to a very inferior article produced in some parts of the South, by the old-fashioned method of melting and mashing comb, bee-bread, brood and dead bees, and running the filthy mass through a cloth strainer. Mangrove honey is nearly as clear and white as the best white clover honey, and has a mild and pleasant flavor. Orange, palmetto, and gallberry honey—our principal honey-plants in the interior—are, in my opinion, much superior to buckwheat honey, and they are certainly much lighter in color than buckwheat, or even golden-rod, and should be graded and sold on their merits as mangrove, orange or palmetto, as the case may be.

GEO. W. WEBSTER.

Mangrove and Palmetto Honey.

After the reading of Prof. Webster's essay, the following discussion ensued:

Prof. Cook—I think that something ought to be done in the way of recognizing the difference between mangrove honey and the ordinary Southern honey. The mangrove honey is certainly fine honey, and ought not to suffer from having the name "Southern" honey given to it.

J. Y. Detwiler—if this convention would recognize the superior quality of palmetto and mangrove honey, and urge the editors to make a distinction between this and other Southern honey, in their market quotations, it would be a great help to the bee-keepers of Florida.

Upon motion of Dr. Miller, it was voted that the editors of the bee-papers be requested to quote mangrove and palmetto honey under their proper names, and to continue to keep these names in their quotations. If there is no honey of these kinds in the market, simply say, "None in the market."

The attention of the meeting was next turned to a discussion of the

Lessons of the Season.

Dr. C. C. Miller recounted the failures of the past season. Not only had the honey crop been a light one, but he had been called upon to bear troubles and afflictions, still, he had been happy; he thought that the greatest lesson he had learned was that of being contented under adverse circumstances.

R. F. Holtermann became disgusted with bees the first year he kept them,

sold out, and the next year the average honey crop was 200 pounds per colony. He had learned that it was best to "stick to it."

Prof. Cook thought that one lesson of the season was in that it showed the desirability of combining bee-keeping with some other business. He called attention to the amount of honey that Mr. Taylor could have secured by moving his bees. This should teach us what might be done by moving bees to better pastures.

The convention now took a recess of ten minutes.

When called to order, the members were once more pleased, set to laughing this time by Dr. Miller's singing a song entitled, "Dot Happy Bee-Man," the words being written by Eugene Secor, and music by Dr. Miller.

The next topic taken up for discussion was,

The Time for Putting Bees into Winter Quarters.

Dr. Mason had put bees into the cellar on Oct. 19, and others later; and there was no particular difference in regard to the amount of stores consumed, or in the wintering of the bees. The average consumption of stores was six or seven pounds per colony.

E. R. Root said that their colonies consumed, on an average, about 12 pounds per colony.

Prof. Cook had done considerable weighing of bees. Out-of-doors the consumption of stores per colony averaged about 15 pounds; in the cellar, 8 pounds. He knew that bees could winter well in a light cellar, but as a general thing he did not think they would.

Dr. Mason knew that light was injurious. He had had bees continue to leave their hives on account of the light, until the hives were depopulated.

Dr. Miller had had bees remain quiet in the cellar with the sun shining upon the hives. If the bees are uneasy, the light will disturb them; otherwise it probably will not. He did not advise light in a cellar.

Prof. Cook—This may not be exactly the place to talk of hives, but I have noticed that bees have wintered the best in the "New Heddon Hives," and I have wondered if others have noticed it. I have been at a loss to account for this, as it has been without exception. Sometimes I have thought that it might be because the combs were $\frac{1}{2}$ an inch above the bottom-board; and again, I have been inclined to attribute it to the fact that the upper story was filled with honey, while the lower one was empty.

Frank A. Eaton had never succeeded in wintering bees in the cellar until he began raising the hives from the bottom-boards.

R. L. Taylor—My experience with the Heddon hive has been similar to that of Prof. Cook's; but I do not attribute it to the same cause as he does. I think that it is caused by the space between the upper and lower cases. As cold weather comes on, the cluster contracts. With large combs small clusters of bees become isolated and chilled; they may not be killed outright, but their vitality is impaired. With the Heddon hive the center of the cluster is where the break comes in the frames, and all the bees can readily keep in the cluster.

Dr. Tinker—Mr. Taylor may be stating facts when talking of single-walled hives, but with properly constructed chaff hives his views would be untenable.

R. L. Taylor—In breeding up bees in the spring, I have decidedly the best results with the new Heddon hive, as compared with the Langstroth-Heddon hive.

The convention then adjourned until 7 p.m.

EVENING SESSION.

The convention was called to order at 7 p.m., with President Mason in the chair. The first question brought up for discussion was,

Sections Open on all Sides.

Dr. Tinker led the discussion, and spoke in substance as follows: Open-side sections afforded better ventilation. If the surplus apartment is divided into too small apartments, the ventilation is deficient, and more time is required for ripening the honey; hence not so much honey is secured. The combs are built out square and true to the edges, and the sections filled full. Italian bees, with closed-side sections, often draw in the comb—make it thinner—as they approach the uprights to the sections, connecting the comb to the uprights by merely a narrow ledge. With open-side sections this is avoided.

A. I. Root had noticed this drawing in of the comb as it approached the sides, but did not think that this was always the case. He recounted the experiments of Mr. A. Rice in the house apiary. He placed small sections inside of ordinary brood-frames, hung them the usual distance apart, and the bees filled them most completely. Later he tried the ordinary sections, wide frames and separators. After trying them he was led to exclaim: "I wish that the little scamps would fill out the sections as well as they used to in the old brood-frames!"

R. L. Taylor asked, why not get rid of the Italians, keep such bees as would fill out the sections whether open-sided or not?

Dr. Tinker admitted that black bees and some hybrids would give no trouble in this direction.

Frank A. Eaton—There is one objection to open-side sections, and that is in crating, the corners catch and tear the combs.

Dr. Miller had produced and shipped thousands and thousands of pounds of comb honey, and the sections were well filled, and bore transportation without loss from breakage, and they were close-sided sections.

Dr. Tinker still clung to the idea that more honey could be secured by using sections with open sides, and that with care in handling there need be but little if any damage done to the combs.

Next came a discussion upon,

How Can Safety be Secured in the Mating of Queens?

A. I. Root said that the appearance of hives had much to do with it. King birds sometimes probably catch them. Sometimes queens cannot fly. They leave the hive and cannot get back. To know whether a queen can fly, toss her up in the air.

Prof. Cook had scarcely lost any queens until the present season, when the loss was nearly one-half. Previous to this season the hives had stood in the shade of evergreens. These trees had been of different sizes, character and appearance. This year they were all cut away.

R. L. Taylor thought that bees and queens were guided in finding their hives by the larger surrounding objects, trees, etc., rather than by the hives themselves.

Dr. Miller did not think that increasing distance between the hives aided the bees very much. He would place the hives in groups.

Following this came a lively little discussion upon

The Use of Chaff Hives.

E. R. Root led in the discussion, very fairly presenting the good and bad features. They afforded protection from cold, also from the direct heat of the sun's rays. The bees are always ready for winter, so far as protection is concerned, and the cool nights of late summer do not drive the bees from the supers. With chaff hives there is no laborious carrying of bees in and out of the cellar. Mr. Root said that by referring to their statistics, they found that cellar wintering of bees predominated in Michigan, Wisconsin, Iowa and Minnesota; as far south as southern Ohio chaff hives and cellars held about equal sway; south of this, chaff-hive wintering of bees greatly out-numbered other methods.

Dr. Tinker thought that the saving in stores in the spring would alone pay for the expense of chaff hives.

Frank A. Eaton emphasized the point of leaving the bees in the cellar until the danger from cold is over; then the bees make rapid progress, and chaff hives are not needed.

Dr. Tinker replied that we often have frosts after warm weather has been "on deck" several weeks.

R. L. Taylor admitted that there might be a saving of honey by having the bees protected early in the year, but for actual work in the apiary, producing either comb or extracted honey, he could not endure using a chaff hive, and did not see how any man could. Their capacity is limited—only 50 sections can be used upon one hive, and it is often desirable to put on 100. Only one set of extracting combs can be used, and it is often desirable to use several. The hives are heavy and unwieldy, and if it were desirable to move an apiary to more desirable pasture, chaff hives would almost prohibit it.

Dr. Mason called attention to the fact that 80 sections can be placed in a chaff hive.

R. L. Taylor—Oh, yes, if you put them in wide frames; but I can't "play" with my bees in any such way as that. When I said 50 sections, I meant when they are in cases so that you can work with them.

John Calvert called attention to the single-story chaff hives. It overcame most of the objections urged against the chaff hive.

R. L. Taylor—Yes; but the trouble is, the chaff hives do not do what is claimed for them. They do not winter the bees. A single-walled hive is just as good for wintering bees; with it the sun can warm up the bees; with a chaff hive it does not.

Dr. Mason would prefer to winter the bees in the cellar, but valued protection for them in the spring. If he wintered his bees out-of-doors, he would use chaff hives.

Mr. Chase mentioned that Mr. Shane had two apiaries. In one the bees are protected in the spring by packing; in the other they are not. The packed apiary always comes out ahead, and gives the best results.

Frank A. Eaton did not get in a hurry to take the bees from the cellar. They were left in until chaff hives were not needed.

The following interesting letters were then read:

DAYTON, O., Oct. 2, 1888.

MY DEAR FRIENDS:—I am very sorry to say that I cannot be present at your meeting at Columbus. I have taken

such a heavy cold that it will not be safe for me to leave home. It oppresses me so much that I cannot even commit to paper the essay which I have prepared.

I am more disappointed than I can well express, for I was looking forward to a very happy time in seeing again many of my old friends.

Wishing you a pleasant and profitable meeting, and desiring to be kindly remembered to you all, I remain very sincerely your friend,

L. L. LANGSTROTH.

PEORIA, Ills., Oct. 3, 1888.

I regret exceedingly that I am not meeting with you to-day. My poor health would not justify the outlay of strength necessary to travel all night to reach Columbus. I hope that Father Langstroth is there. I imagine I see him now, with his hand upon his cane, with his benignant face beaming upon all.

MRS. L. HARRISON.

FOREST CITY, Iowa, Oct. 1, 1888.

Travel, reading, observation and conversation with bee-keepers in various parts of the State lead me to think that the crop of honey is light in Iowa this year. While the season has been better than last as regards the condition in which the bees will be at the beginning of winter, and perhaps also as to the quantity of surplus, it is mostly fall honey and off color, though the quality is good.

The severe drouth of 1887 so killed the white clover that it required all this season to regain its foothold in the pastures. I doubt if it is fully re-established now. So we got no white clover honey worth speaking of. Basswood (linden, if you like the word better) blossomed very full in 1887. This was its off year, and the yield light. The fall flowers yielded fairly well. Bees seem to be in good condition. I have not heard of any foul brood.

The Chapman honey-plant was tried to some extent. There is no doubt about the fondness of bees for it, but whether it would pay to cultivate for honey, is another question. A fine exhibit of bees, honey and implements was made at our State Fair, and at some of the local fairs. The art of bee-keeping seems to be keeping step to the music of progress in other departments of rural life.

EUGENE SECOR.

Upon taking a vote, it was decided to hold the next meeting at Brantford, Ont.

The convention adjourned until 9:30 a.m. the next day

SECOND DAY.

MORNING SESSION.

President Mason called the convention to order at 9:30 a.m. The first topic discussed was,

The Width of Sections.

J. H. Smith made several widths of sections, but sold ten thousand of the inch and seven-eighths to one thousand of any other width.

E. R. Root said that their experience was that of Mr. Smith's.

Frank A. Eaton said that it all depended upon whether separators were used. One inch and seven-eighths was the proper width with separators; if they are not used, the sections must be narrower.

Dr. Tinker preferred that the space between the top-bars and between the bottom-bars should be $\frac{1}{2}$ of an inch, instead of the usual $\frac{1}{3}$ of an inch.

The next topic was,

When Shall Bees be Put Out of the Cellar?

Dr. Besse—When there is something for them to do. When they can gather pollen.

Dr. Miller—About two weeks after the right time. [Laughter and cries of "good;" "that's it."] I suspect that we put our bees in too late, and take them out too early. I used to take them out at the blossoming of the soft maple, but it has several times fooled me. Freezing weather came on again after the maples had blossomed.

Next came a discussion in regard to the subject of

Securing More Complete Organization Among Bee-Keepers.

Dr. C. C. Miller—We have local societies, State societies, and the North American Society; and the latter is largely local. Unless something is done to make it more completely a representative body, we might just as well kill it and done with it. I would suggest that the State and local societies send delegates, and pay their expenses.

Prof. A. J. Cook—The State and local societies will not do this, and I do not believe that this society is yet ready to die. Suppose that we do have a large local attendance, we also have a scattering attendance from abroad. We could have the different States represented by essays from their best men.

A. I. Root mentioned that religious bodies send delegates to meetings and conventions and pay their expenses. Apicultural societies might do the same. He would give more to see a man and hear him talk than he would to have an essay from him.

Upon motion it was voted that all State and local societies be invited to send delegates to the North American Society's conventions.

Next came an interesting talk by Prof. A. J. Cook, upon,

Experiments in Apiculture.

With one or two exceptions, the Michigan Agricultural College is the only one that has experimented in apiculture. Until lately there has been a lack of time in conducting the College apiary. At last an able assistant has been secured, and the passage of the Hatch bill has provided the funds, and the prospects are that much more will be done. One line of work will be that of crossing different varieties of bees; another, that of determining the value of special planting for honey; and the third will be in regard to the adulteration of honey. Rocky Mountain bee-plant, Chapman honey-plant, pleurisy-root, and perhaps others will be tried. Considerable is hoped for the Rocky Mountain bee-plant, as it flourishes in a drouthy climate. At present the bees at the College are a cross between the Syrians and the Carniolans, and they seem to possess the good qualities of both.

Prof. Cook feels sure that bee-keepers do not adulterate honey, neither does he believe that it is done by grocers. He considers them no more honest than many other classes, but adulteration does not pay. He does not believe that the chemist can tell positively in regard to adulteration, and experiments are to be made to determine, if possible, whether adulteration can be detected.

A. I. Root asked how Prof. Cook knew that their bees were a cross between the Syrians and Carniolans.

Prof. Cook—We do not know positively. There are no bees nearer than three miles. Besides, I have studied the characteristics of each race, and I cannot fail to recognize them.

Mr. Thomas G. Newman then addressed the convention in substance as follows upon the

The Importance of Experiments in Apiculture.

Mr. President, Ladies and Gentlemen:

The announcement just made by Prof. Cook, that he intends to commence the making of careful experiments on the four important points enumerated will give great delight to the devotees of our pursuit, because the promised experiments will cover the ground of not only the value of the different varieties of bees, but also the necessary pasture to be provided, and the application of the most successful methods to be employed in

the management of the apiary for profit.

We know but a very little of the arts and sciences—only just what has been found out by experiments, or by accident! We have seen only that which we had eyes to see; and the value of experiments—of training—of delving into the unknown—of studying the possibilities—lies in the opening of our intellectual eyes to see what there is in Nature all around our pathway! Was Stephenson a genius? Was Franklin brilliant? No; but both of them were full of observation, perseverance and intelligence, and these characteristics were diligently aided by common sense.

It has been well remarked that if necessity was the mother of invention, surely an American was its father! Success lies in working with Nature, for it contains the secrets of all inventions. Here we may study, delve, guess, invent or copy to our heart's content. The human arm suggested the lever to Archimedes. The human skull was well studied by Michael Angelo, who designed the dome of St. Peters. The waves of the fury-lashed ocean led Napier to invent the shape of the "bow" of a steamship best suited to plow the waves and triumphantly ride over its tempest-tossed bosom. The latter let us more fully describe, that we may learn a valuable lesson therefrom.

The first steamships built in Scotland dared not to venture out of the firths and rivers in stormy weather. But David Napier, the celebrated marine engineer, thought that they could be so built that they could navigate the ocean in all kinds of weather, and accordingly he determined to know and personally observe the difficulties to be encountered and overcome.

Sailing packets were then running between Glasgow and Belfast, and he selected a stormy period of the year to make that voyage, in order to study the waves when driven with fury, for St. George's Sea is noted for its dangers, and the number of its shipwrecks. He stood for hours at the "bow" of the packet, watching the breaking of the waves—now and then leaving that chosen post to inquire of the captain if he considered the sea rough. When assured that so far it was nothing unusual, he returned to his post with disappointment.

The drenching spray he cared naught about, but the "ordinary weather" made him impatient. At last the wind increased—it blew a gale—and wave after wave "swept the packet from stem to stern." With this he was delighted, and dripping with salt water he made his way to the captain and asked, "Captain, do you

think it is rough now? who replied, "I never faced a worse sea, sir!"

Napier exclaimed, "Well; if that is all, I think I can master it!" He went below to meditate, and on his return to Glasgow, he began to experiment—just as Prof. Cook now promised us to do, but in another line. He aimed to discover the shape of the "bow" which would go through the water with the least resistance.

His observations, taken while being drenched with the waves at the "bow" of the packet, convinced him that the round bow of the sailing vessel was not calculated for a fast steamship.

Repeated experiments led him to believe that the fine wedge-shaped "bow" would revolutionize the world in the matter of steamship building. Then it often required several days to sail between Glasgow and Belfast! Now it requires but nine hours—all because of the experience and experiments of that undaunted marine engineer.

Now our modern "Napier," who has taken special pains to find out what necessity requires, will retire to his quiet haunts at the State Agricultural College, away up in Michigan, to meditate and experiment on the four important points which he enumerated a few minutes since! Let us hope that he will discover and bring to light matters and methods as important to progressive bee-culture as did Napier to ocean travelers, but a few years ago.

We all are aware that the survey precedes the building of the railroad, and the reconnaissance locates the field and line of battle. Just so is it with us, at this time. Prof. Cook knows the difficulties to be encountered—he has "studied the waves of adversity" which have repeatedly dashed over our chosen pursuit, and caused much consternation. He has "surveyed the line" upon which it is to be hoped we can all ride to success; and located the plan of battle which may give us the victory. We shall anxiously await the result of his meditations.

Bee-Pasturage.

One of the cardinal points is that of providing pasturage for the bees. He proposes to plant ten acres of the Rocky Mountain bee-plant—to plant broadcast, and let it take care of and perpetuate itself. This matter of planting for honey has been a pet theory for years, with me, and I hail the day for an experiment on a large scale, feeling assured that it is one of "the winning cards."

Those depending on the wild pastures for bee-forage should not fail to plant for honey, and thus secure a

good crop every season, as the years come and go. If drouth comes and finds them depending on streams which dry up, they are then the sufferers.

They should have pastures for the bees, with plants having deep roots to go and seek the moisture below, or else have pastures that can be watered from convenient wells or ponds, and thus aid Nature to secrete the nectar in the dry times.

Every season teaches some new and useful lesson. Those who heed these lessons are on the rise. Those who do not are on the down grade. Will apiculturists be content to repeat each year the mistakes of the former one? If they are wise, No. If they are heedless and unprogressive, Yes.

Honey Adulteration.

It has been asked here and elsewhere if extracted honey is now being adulterated? I answer, No. It will not pay to adulterate honey at its present very low price, and hence it is not practiced, for even the thieves and adulterators will not ply their nefarious business when it is unprofitable to do so.

As to the adulteration of comb honey, the truth about that is out at last. Wiley, Evans & Co., have been driven to the wall, in two ways; first by their having been forced to confess that there was nothing upon which they could build their "bogus comb-honey" story, except the wild imagination of a diseased brain; and the fun of perpetrating a very un-scientific pleasure!

And, in the second place, immediate sale of the small crop of honey had made bare the great marts of trade, and while the demand was urgent, and the prices high, not a single pound of the bogus comb honey could be found! More than anything else, this shows the falsity of the claim, and exposes the lie about "combs being made of paraffine, filled with glucose, and sealed by machinery?"

Not a crate—not a section—not a pound—not a cell of the bogus "comb honey" can be found on the markets! Not even the advanced prices can bring it to the front! If it was in existence, how the manufacturers of the bogus stuff would jump at the chance to sell it! How they would run the machinery night and day to fill the demand!

The citadel is stormed!

The giant is slain!

Comb honey is vindicated!

Prof. Wiley's lie is exposed!

The peddlers of the lies are rebuked!

The "prince of lies" is defeated.

The honey crop failure did it.

THOMAS G. NEWMAN.

A. I. Root mentioned that Dr. Miller had secured large quantities of honey from 200 acres of cucumbers raised near him. This showed that honey could be secured from *that* plant.

Dr. Miller—I think no one person, unless it is Mr. Root, has done so much planting for honey as I have. Because Prof. Cook finds some plant valuable for honey, it does not follow that we shall all find it valuable; still, we are glad he is doing something in this line. Does the Professor expect to cultivate his Rocky Mountain honey-plant?

Prof. Cook—No; we cannot do much in the line of cultivation. A plant to be of value must be able to take care of itself, a sort of "root hog or die" plant.

A. I. Root—What better does Prof. Cook expect to find the Rocky Mountain honey-plant than is buckwheat?

Prof. Cook—It will stand drouth. It is brought up on dry weather. A dry locality is its home.

Dr. Mason said that he had been in attendance at the Ohio Centennial for the past five weeks, and it was astonishing to see the amount of belief there is in the adulteration of honey.

R. F. Holtermann then gave the following address on the

Value of United Experiments in Apiculture.

Who amongst bee-keepers does not look back with deep and heartfelt gratitude to such men as Huber, Dzierzon, Langstroth, Quinby, and a host of others? and it takes but a moment of reflection to bring to our mind's eye a picture of these men toiling day after day, yes, year after year, to gain a perfect and reliable knowledge of the natural history and habits of the honey-bee. What vast benefits apiculture has derived, and what great strides it has made to make it an important branch of agriculture, not only the bee-keeper but every well-informed citizen knows.

Why is it that so much credit is due these men? Because they stand out and above other men of their day—because they were leaders and benefactors. True, they stood comparatively alone, and had to follow their researches too often unaided, and not only with no one to cheer and help them, but rather, with those about them to sneer and misunderstand. Now these men are leaving, and have left, a rich legacy to posterity. They have not followed their own selfish aims and ambitions, but in some instances have gained no temporal advancement, and for our benefit.

Are we then making the best use of our advantages? Are we doing our duty faithfully, are we making use of that intelligence which we so right-

fully claim as characteristic of bee-keepers, and are we with these advantages—so much greater in our age than those of our fathers—preparing a legacy for posterity? We are doing much, but not all that we might.

The Manager of our Bee-Keepers' Union uses the old and true motto, "In union there is strength;" this is pre-eminently true of researches or experiments. We have not the plea that our forefathers had; we have numbers who are only waiting to do such work in union, and we have organizations and means of advertising and reaching them, that our fathers never had. Let us then organize and do the most that skill and energy can devise.

Every branch in agriculture is ahead of us. How many associations are performing experiments through its members. Let us then cast aside in this matter all other motives, and together aim at the elevation and perfection of our chosen pursuit, laying aside all petty jealousies, all desires to self-elevation, and in *union* conduct the experiments decided upon to investigate, no matter who may have led us in that direction.

I believe that one of our greatest failures has been, coming to conclusions too rapidly. A new and (as far as theory goes) grand idea impresses us, or the result of one season's experience leads us to believe we have made a discovery which will immortalize our names, and we advance and defend that discovery only to lead others and ourselves astray. Now if we want to be of the greatest use, we must keep under, these our sanguine and selfish dispositions, and in the calm light of reason and lofty desire to advance and elevate apiculture, unite and decide upon some line of experiment; and right here is the difficult question to decide, what shall that be?

I had the honor of being appointed one of a committee by the "Ontario Agricultural and Experimental Union," to decide upon a line of experiment for those of its members interested in bee-keeping. After study the committee felt that so important was it to decide upon the most practical and easily conducted experiments, that we decided upon consulting the members of the North American Bee-Keepers' Society, and the members of the Ontario Bee-Keepers' Association in convention, before taking any decided step in the matter.

The thought was, to have two or three lines of experimentation, and these for the different seasons of the year. For instance, we have men who are able, and have the time and means at their disposal, to make minute and scientific researches of practical value. Again, we have those who have many

colonies who can conduct researches, where a large number of colonies are advantageous, but who cannot undertake anything which will require a great outlay of time.

Again, those who have fewer colonies, who are plain, practical men, and could conduct ordinarily careful experiments, in spring, summer, autumn and winter, and those again who could only conduct them during one or more of these seasons. Every opportunity should be given to every bee-keeper to join in something. In wintering bees, especially, there should be no drones in the hive. I hesitate to set forth what we shall experiment upon—my desire is rather to rivet your attention upon the grand possibilities before us, knowing that practical minds here, will do the rest.

Of course we can never take the place of a man who can devote his life's energies to experimental work, and can secure what necessary means are required to conduct his labors properly—at the same time we can attain results that he never can, and in a shorter time.

Let us lose no time. Let a line of work be decided upon for the coming winter and the coming year. How vast a work can we accomplish, how great our sphere of usefulness by earnest, careful and conscientious work!

In one year, in certain directions, we can make more progress by this method, than before in ten. But I need not point out to a bee-keeper the advantage to be secured by united, whole-souled organization to accomplish any work; no more fitting example of this can be found than in the homes, the occupants of which we are the "masters." R. F. HOLTERMANN.

The convention then adjourned until 2 p.m.

OHIO.

The Report of the Ohio State Convention.

The Ohio State Bee-Keepers' Association held its sixth annual meeting in conjunction with the North American Bee-Keepers' Society on Oct. 3, 4, and 5, 1888, at Columbus, O. A special business session was held on Oct. 4, for the election of officers for the coming year, which resulted as follows:

President, H. R. Boardman, of East Townsend; Vice-President, John Calvert, of Medina; Secretary and Treasurer, Miss Dema Bennett, of Bedford.

On motion the convention adjourned to hold the next annual meeting at Cleveland, O., on the call of the executive committee.

FRANK A. EATON, Sec.

CORRESPONDENCE.

SPANISH-NEEDLE.

Good Flow of Fall Honey—A Streak of Luck.

Written for the American Bee Journal
BY JOS. M. HAMBAUGH.

Having two out-apiaries in connection with my home apiary and farm work combined, has made this one of the busiest seasons on record. Did I sit down and pine over the discouraging results of last year? Hardly. I simply made the best of circumstances, and set myself to work with renewed zeal, notwithstanding the taunts of the "wiseacres" and "knowing ones," who from the beginning said, "I told you that you would get bee-stung."

Well, my bees were divided as before stated, into three yards, the ones at home composed of Italians and hybrids, and all three yards were accessible to linden timber. White clover was a complete failure, and many colonies had to be fed to bridge them over from fruit-bloom to basswood, and when this bloom came—which was the most profuse I ever saw in this section—the bees seemed to revel in their glory, and our long-pent-up enthusiasm was boundless.

We were too sure, however, for though the surplus receptacles were quickly filled, the nectar seemed exceedingly crude, and we waited patiently to see the white cappings appear—the apiarist's criterion for ripe honey. The golden plumes began to drop, and seed-balls appear, and yet our honey was uncapped.

On July 19 the attention of the bees was drawn to the river bottom, only from one-half to a mile distant, and having adverse experience with honeydew and dark honey, I concluded that I would not allow the linden honey to mix with it, and I extracted, and now comes the problem of getting rid of about 1,000 pounds of unripe linden honey.

It was about this time that button-bush began to yield quite a showing for honey, and brood-rearing and swarming was the order of the day, where colonies were not given plenty of room, and this served to put all the colonies in splendid condition for the fall harvest. It was a sight to see the seething mass of insects issuing from a 3-story, 10-frame Simplicity hive, with one inch blocks under the front corners to give them vent, and one would wonder how many of the 8-frame divisible brood-chamber hives it

would take to produce the same results.

Never in my memory have I seen honey come in as lively as it did during the *cereopsis* or Spanish-needle flow; and the beauty of it was, it seemed to be "already cooked," and almost as soon as the cells were filled, they were sealed. One colony produced 73 pounds of honey in five days' time; another one, 86 pounds in ten days; and the gross receipts from 42 colonies at the home apiary was 2,009 pounds of honey at one extracting, and they had been extracted from but 5 to 8 days previous—an average of 47 pounds per colony.

My other apiaries did remarkably well, but the Italians and hybrids "get away" with the ordinary bee by odds. The total product of one Italian colony of bees was 264 pounds. I am not prepared to give any report just yet, but it will aggregate nearly 10,000 pounds. So please do not class me among "blasted hopes" and one of the "bee-stung."

Spring, Ills., Oct. 8, 1888.

CONVENTION DIRECTORY.

1888 Time and Place of Meeting.

Oct. 20.—Wabash County, at Wabash, Ind.
Henry Cripe, Sec., North Manchester, Ind.
Nov. 14.—Alabama State, at Montgomery, Ala.
J. M. Jenkins, Wetumpka, Ala.
Nov. 21, 22.—Pan-Handle, at Wheeling, W. Va.
W. L. Kinsey, Sec., Blaine, O.
Dec. —Michigan State, at Jackson, Mich.
H. D. Cutting, Sec., Clinton, Mich.

[In order to have this table complete, Secretaries are requested to forward full particulars of time and place of future meetings.—ED.]

SELECTIONS FROM OUR LETTER-BOX

More than Half a Crop.—Daniel Sheldon, Strawberry Point, Iowa, on Oct. 5, 1888, says:

Although the first bloom of white clover yielded but little honey here, basswood, second bloom of white clover, horse-mint, golden-rod, etc., have kept the industrious little workers busy until they have secured more than half a crop in this section. Bee-keepers are not discouraged here. I have had uniform success in cellar wintering of bees. I raise the hives up on inch blocks, keep the temperature at about 40°, and remove the dead bees frequently.

Buckwheat and Alsike Clover.—C. A. Bunch, La Paz, Ind., on Oct. 8, 1888, writes:

As I believe that buckwheat always produces nectar in this locality, I value the plant very much. I do not think that it produces a large amount of honey, though it puts the bees in good condition for golden-

rod, which out-stripped all plants and honey or nectar-producing trees here this season. There was ten acres of buckwheat in less than one-half mile of my apiary, which was alive with bees almost every morning until 9 a.m., and on some warm, misty days until later or nearly noon, although August and September were very dry months, with very little rain. I think that my 28 colonies stored some over 200 pounds of honey from buckwheat in one-pound sections, which is not so bad, I think, considering the season we have had. I have had a small amount of Alsike clover on my place for the last two years, which seems to be good as a honey-plant, as well as for pasture. I expect to sow a half bushel of Alsike clover next spring.

No Surplus Honey.—Henry A. Hyle, Redwood, N. Y., on Oct. 5, 1888, says:

I now have 5 colonies of bees, but I received no surplus honey this year, and I will have to feed my bees pretty well to make up for the lack of honey for winter stores. I lost 4 colonies last winter. I have a good location for keeping bees, and after three years' experience. I think that I am safe in keeping more bees than heretofore.

Hardly an Average Fall Crop.

—W. M. Woodward, Custer Park, Ills., on Oct. 6, 1888, writes:

The honey crop has been slow here. There was none at all until corn tasseled, when honey began to come slowly from corn, and has continued to come from heart's-ease and other fall flowers. The fall crop is hardly an average one, but a great blessing for these times.

Molasses Barrels and Jugs for Honey.—F. C. Erkel, Le Sueur, Minn., on Oct. 7, 1888, writes:

My bees have done as well as could be expected considering the season. I moved 35 colonies last spring, by wagon, 12 miles, on 2 or 3 feet of hay, and found the combs all in good condition with one exception, and they were not very bad. I got no honey from clover this year, but the bees made things lively for a few days on basswood, but it did not last long; however, they filled up below in the hive, and I got some nice white comb honey.

Autumn flowers yielded well, and I obtained considerable comb honey from that source, besides a little more than doubling my stock. The bees were determined to swarm late, and kept me busy putting them back. I have more than I want now, and think that I shall kill 15 or 20 colonies and extract the honey. I have a great deal to learn about bees yet, especially how to produce comb honey. I would like the following questions answered in the BEE JOURNAL: 1. My 10-frame Langstroth hives are nearly all full. Would it not be advisable to extract from two or three frames before getting them ready for the cellar? 2. Would it be advisable to put extracted honey in second-hand molasses barrels, such as can be bought at groceries? 3. How would common one-gallon jugs do to put extracted honey in, if the honey was heated to keep from granulating?

[1. Yes.

2. If you do not care to preserve the flavor, the molasses barrels may be used. If you do want the flavor preserved, use new kegs or new barrels.

3. If it granulates, you will find it troublesome to liquefy and handle it.—ED.]



ALFRED H. NEWMAN,
BUSINESS MANAGER.

Business Notices.

If You Live near one post-office and get your mail at another, be sure to give the address that we have on our list.

Hilton's new pamphlet on Comb Honey Production has been reduced in price to 5 cents. For sale at this office.

If you Lose Money by carelessly enclosing it in a letter, it is without excuse, when a Money Order, which is perfectly safe, costs but 5 cents.

Paper Boxes—to hold a section of honey for retail dealers. We have two sizes on hand to carry sections $4\frac{1}{4} \times 1\frac{1}{4}$ and $5\frac{1}{4} \times 5\frac{1}{4}$. Price, \$1.00 per 100, or \$8.50 per 1,000.

Preserve Your Papers for future reference. If you have no **BINDER** we will mail you one for 60 cents; or you can have one **FREE**, if you will send us 3 new yearly subscriptions for the **BEE JOURNAL**.

Yucca Brushes, for removing bees from the combs, are a soft, vegetable fiber, and do not irritate the bees. We supply them at 5 cents each, or 50 cents a dozen; if sent by mail, add 1 cent each for postage.

Please write **American Bee Journal** on the envelope when writing to this office. Several of our letters have already gone to another firm (a commission house), causing vexatious delay and trouble.

Pure Phenol for Foul Brood.—Calvert's No. 1 phenol, mentioned in Cheshire's pamphlet on pages 16 and 17, can be procured at this office at 25 cents per ounce. Not being mailable, it must be sent by express.

Apiary Register.—All who intend to be systematic in their work in the apiary, should get a copy of the **Apiary Register** and begin to use it. The prices are as follows:

For 50 colonies (120 pages)	\$1.00
" 100 colonies (220 pages)	1.25
" 200 colonies (420 pages)	1.50

Photographs of Bee-Keepers.—The "medley" gotten up by E. O. Tuttle, containing the faces of 120 representative apiarists, and a printed sketch of each one, will be sent with the **BEE JOURNAL** for one year for \$1.75; or we will present it *free*, by mail, to any one, for a club of three subscribers and \$3.00.

CLUBBING LIST.

We Club the *American Bee Journal* for a year, with any of the following papers or books, at the prices quoted in the **LAST** column. The regular price of both is given in the first column. One year's subscription for the *American Bee Journal* must be sent with each order for another paper or book:

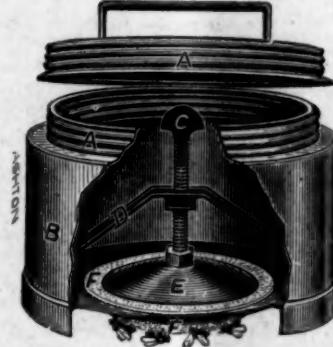
Price of both. Club
The American Bee Journal 1.00....

and Gleanings in Bee-Culture.....	2.00	1.75
Bee-Keepers' Magazine.....	1.50	1.40
Bee-Keepers' Guide.....	1.50	1.40
Bee-Keepers' Review.....	1.50	1.40
The Apiculturist.....	1.75	1.60
Canadian Bee Journal.....	2.00	1.80
Canadian Honey Producer.....	1.40	1.30
The 8 above-named papers.....	5.65	5.00

and Cook's Manual.....	2.25	2.00
Bees and Honey (Newman).....	2.00	1.75
Binder for Am. Bee Journal.....	1.00	1.50
Dzierzon's Bee-Book (cloth).....	3.00	2.00
Root's A B C of Bee-Culture.....	2.25	2.10
Farmer's Account Book.....	4.00	2.20
Western World Guide.....	1.50	1.30
Heddon's book, "Success".....	1.50	1.40
A Year Among the Bees.....	1.75	1.50
Convention Hand-Book.....	1.50	1.30
Weekly Inter-Ocean.....	2.00	1.75
Iowa Homestead.....	2.00	1.90
How to Propagate Fruit.....	1.50	1.25
History of National Society.....	1.50	1.25

Hastings' Perfection Feeder.—This excellent Feeder will hold 2 quarts, and the letting down of the feed is regulated

Patented Oct. 18, 1887.



by a thumb-screw. The cap screws securely on. It is easy to regulate—either a spoonful or a quart—and that amount can be given in an hour or a day, as desired. By it the food can be given where it is most needed—just over the cluster. Not a drop need be lost, and no robber bees can get at it. A single one can be had for 40 cents, or a dozen for \$3.50, and it can be obtained at this office. Postage 10 cents extra.

Red Labels for Pails.—We have three sizes of these Labels ranging in size for pails to hold from one to ten pounds of honey. Price, \$1 for a hundred, with the name and address of the bee-keeper printed on them. Smaller quantities at one cent each; but we cannot print the name and address on less than 100. Larger quantities according to size, as follows:

	Size A.	Size B.	Size C.
250 Labels.....	\$1.50	\$2.00	\$2.25
500 Labels.....	2.00	3.00	3.50
1,000 Labels.....	3.00	4.00	5.00

* Samples mailed free, upon application.

The Convention.—The pamphlet containing the report of the proceedings of the Union Convention in Chicago, Ills., is published, and can be obtained at this office for 25 cents. Or bound up with the history of the International Society, and a full report of the Detroit and Indianapolis conventions, for 50 cents, postpaid.

Clover Seeds.—We are selling *Alsike Clover Seed* at the following prices: \$8.00 per bushel; \$2.25 per peck; 25 cents per lb. *White Clover Seed*: \$10.00 per bushel; \$2.75 per peck; 30 cents per lb. *Sweet, or Mellot, Clover Seed*: \$6.00 per bushel; \$1.75 per peck; 20 cents per lb.—by express or freight.

Cork for Winter Packing.—Its advantages are that it never becomes *musty*, and it is *odorless*. Cushions can be made of cloth and filled with the cork, for winter packing. We can supply all orders now at 10 cents per pound. Or a seamless sack of it, containing 15 pounds, for \$1.00.

Exchange.—We will accept Honey and Beeswax in exchange for Bee-Keepers' Supplies in any quantity. Those desiring to make a trade are invited to correspond with us, stating quantity, quality, and price, and the goods they want in exchange.

Alfalfa Clover.—For habits and cultivation of this honey-plant, see page 245. We supply the seed at the following prices: —Per lb., 22c.; per peck, \$3.00; per half-bushel, \$5.50; per bushel of 60 lb., \$10.00. If wanted by mail, add 10 cents per pound for bag and postage.

We Want 20,000 subscribers. Out of the 300,000 bee-keepers in America, certainly this is not an extravagant desire! It is only one out of every fifteen! We confidently ask those who appreciate the **AMERICAN BEE JOURNAL**, to show it by sending us one or more new subscribers. We will give them full value for their money.

A Home Market for honey can be made by judiciously distributing the pamphlets, "Honey as Food and Medicine." Such will create a demand in any locality a remunerative prices. See list on the second page of this paper.

A Modern BEE-FARM, and its Economic Management; showing how bees may be cultivated as a means of livelihood; as a health-giving pursuit; and as a source of recreation to the busy man. By S. Simmins. For sale at this office. Price, \$1, postpaid.

Your Full Address, plainly written, is very essential in order to avoid mistakes.

Conventions.—The time for holding Bee-Keepers' Conventions has now arrived, and we cannot give any better advice than this: Let each one attend who can do so, and take part in making these meetings interesting and instructive. If you have not already obtained the "Bee-keeper's Convention Hand-Book," do so at once to post yourself up on how to conduct such meetings correctly. It contains a simple Manual of Parliamentary Law and Rules of Order for the guidance of officers and members of Local Conventions—Model Constitution and By-Laws for a Local Society—Programme for a Convention, with Subjects for Discussion—List of Premiums for Fairs, etc. Bound in cloth, and suitable for the pocket. Price, 50 cents. We will club this book and the AMERICAN BEE JOURNAL for one year for \$1.25. It also contains a lot of blank leaves on which you can note important matters as they come up. Do not fail to send for a copy of it.

Nature's Way.—This is the title of a 15-cent pamphlet entitled, "G. M. Doolittle's Method of Rearing Queens"—which is called "The nearest approach to Nature's way yet devised." It describes his method, and points out its advantages. For sale at this office.

Can You Do Anything that will do more to advance and defend the pursuit of bee-keeping, than to aid its Weekly Exponent and Defender? The AMERICAN BEE JOURNAL is the pioneer bee-paper of America, and is fully entitled to the active support of every progressive apiarist, for it works constantly and faithfully for the best interests of the pursuit. We therefore specially request all our readers to use their influence to double our subscription list during the coming autumn. Reader, will you please send us a new subscription with your renewal or before that time? A good weekly at one dollar a year is surely cheap enough to command patronage.

Always Mention your Post-Office, County and State when writing to this office. No matter where you may happen to be for the hour when actually writing—never mention anything but your permanent address. To do otherwise leads to confusion, unless you desire your address changed. In that case state the old as well as the new address.

Queens.—We can mail a Tested Italian Queen (bred for the best results as well as for beauty) for \$2.00; Untested Queens \$1.00 each, or \$9.00 per dozen. Orders solicited.

We Have some copies of the old edition of Cook's Manual left, which we will sell at the old price, \$1.25. The price of the new edition is \$1.50 per copy; a notice of which may be found on page 579.

Honey and Beeswax Market.

CHICAGO.

HONEY.—New crop arriving slowly, but demand is limited. White clover comb, 17@15c. Extracted, 7@15c.

BEESWAX.—22c. Sep. 12. S. T. FISH & CO., 180 S. Water St.

CHICAGO.

HONEY.—For white comb 1-lbs., 18c. Very little inquiry for anything outside of 1-lbs., and when it is wanted it is at a lower price. Extracted the best grades, 7@14c., and some held higher. Offerings are small and demand slow.

BEESWAX.—22c. Sep. 12. R. A. BURNETT, 161 South Water St.

DENVER.

HONEY.—Colorado, new 1-lb. sections, 19@15c. Extracted, 8c.

BEESWAX.—20@15c. Sep. 7. J. M. CLARK & CO., 1409 Fifteenth St.

NEW YORK.

HONEY.—We quote: Fancy white 1-lbs., 15@17c.; 2-lbs., 14@16c. Fair white 1-lbs., 14@16c.; 2-lbs., 13@15c. Extracted, white, 7@8c.

BEESWAX.—23c. Sep. 17. THURBER, WHYLAND & CO.

NEW YORK.

HONEY.—We quote: Fancy white 1-lbs., 17@18c.; 2-lbs., 16@14c. Fair white 1-lbs., 15@16c.; 2-lbs., 12c. Buckwheat 1-lbs., 11@12c.; 2-lbs., 10@11c. White extracted, 7@8c.; buckwheat, 5@6c.; California extracted, white, sage, 7@6c.; amber, 7@7c. Demand good and prices firm. New comb honey is arriving quite freely.

BEESWAX.—23c. Oct. 10. HILDRETH BROS. & SEGELKEN, 28 & 30 W. Broadway, near Duane St.

SAN FRANCISCO.

HONEY.—White 1-lb. sections, 11@12c.; 2-lbs., 12@13c.; amber, 8@10c. Extracted, white, 5@6c.; light amber, 5@6c.; amber and candied, 4@5c. Receipts light and market firm for best qualities.

BEESWAX.—Dull at 19@22c. Sep. 22. O. H. SMITH & CO., 423 Front St.

DETROIT.

HONEY.—Best white comb, 17@18c.: dark, 16c. Extracted, 8@10c. Market bare of all kinds.

BEESWAX.—21@22c. Sep. 24. M. H. HUNT, Bell Branch, Mich.

CINCINNATI.

HONEY.—We quote extracted at 4@5c. per lb. Comb honey, 12@13c. Demand slow.

BEESWAX.—Demand is good—20@22c. per lb. for good to choice yellow, on arrival.

Sep. 18. C. F. MUTH & SON, Freeman & Central Av.

KANSAS CITY.

HONEY.—Choice 1-lb. sections, 18c.; dark 1-lbs., 14c.; 2-lbs., 18c.; dark, 13c. White extracted in 60-lb. cans, 8c.; amber, 7c.; in barrels and kegs, 5@8c. Demand good, prices steady, and stock fair.

BEESWAX.—None in market.

Sep. 27. HAMBLIN & BEARSS, 514 Walnut St.

NEW YORK.

HONEY.—We quote: Fancy white 1-lb. sections, 17@18c.; 2-lbs., 14@15c. Fair 1-lbs., 14@15@15c.; 2-lbs., 16@12c. Extracted, fancy white clover, 7@8c.; California white in 10-lb. cans, 8c.; light amber, in same cans, 7@8c.; amber, 7@8c. Buckwheat in kegs and barrel, 5@6c. Cuban, in barrels and 1/2-barrels, 65c. per gallon.

Sep. 28. F. G. STROHMEYER & CO., 122 Water St.

BOSTON.

HONEY.—We quote: Best white clover 1-pounds, 16@17c.; best 2-lbs., 15@16c. Extracted, 8c.

BEESWAX.—25cts. per lb.

Oct. 10. BLAKE & RIPLEY, 57 Chatham Street.

KANSAS CITY.

HONEY.—White 1-lbs., 17@18c.; dark, 14@15c.; California white 1-lbs., 17c.; dark, 14c. Extracted white 8c.; amber, 7c.

BEESWAX.—None in the market.

Oct. 11. CLEMONS, CLOON & CO., cor 4th & Walnut.

ST. LOUIS.

HONEY.—We quote: Extracted, 4@5c.; if in cans, 8@9c. White clover comb, 14@15c. Market is steady and receipts light.

BEESWAX.—21c. for prime.

Sep. 6. D. G. TUTT & CO., Commercial St.

MILWAUKEE.

HONEY.—New white 1-lb. sections 18c., and very fine, 20c.; 1-lbs., 15@18c.; old 2 and 3 lbs., not available, 13@14c.; dark 1-lbs., old or new, 12@13c. Extracted, white in bags and 1/2-barrels, 6@8c.; old, in same packages, 7@8c.; in tin, 8@9c.; dark in barrels or 1/2-barrels, 8@9c. Arrival of new crop small; demand not urgent, and only very moderate trade.

BEESWAX.—22@25c.

Aug. 31. A. V. BISHOP, 142 W. Water St.

SAN FRANCISCO.

HONEY.—We quote: Extracted, white, 6 cents; light amber, 8@9c.; amber, 8@9c. Comb, 1-lbs., 13@14c.; 2-lbs., 10@11c.

BEESWAX.—20@22c.

Sep. 24. SCHACHT & LEMCKE, 123-124 Davis St.

We Supply Chapman Honey-Plant **SEED** at the following prices: One ounce, 40 cents; 4 ounces, \$1; 1/2 pound, \$1.75; 1 pound, \$3. One pound of seed is sufficient for half an acre, if properly thinned out and re-set.

Simmins' Non-Swarming System.—We have a few of these books left, and we will club them with the AMERICAN BEE JOURNAL for one year, both postpaid, for \$1.25. The subscription to the BEE JOURNAL can be for next year, this year, or may begin anew at any time.

Dr. Miller's Book, "A Year Among the Bees," and the AMERICAN BEE JOURNAL for one year—we send both for \$1.50.

Please to get your Neighbor, who keeps bees, to also take the AMERICAN BEE JOURNAL. It is now so CHEAP that no one can afford to do without it.

Convention Notices.

The Wabash County Bee-Keepers' Association will hold their fall meeting in the Court House at Wabash, Ind., on Oct. 20, 1888, at 10 a.m. All bee-keepers are cordially invited to meet with us.

HENRY CRIFE, Sec.

The Pan-Handle Bee-Keepers' Association will hold its next meeting in the K. of P. Hall on Main St., between 11th & 12th Streets, in Wheeling, W. Va., on Nov. 21 and 22, 1888. All bee-keepers are cordially invited.

W. L. KINSEY, Sec.

The Alabama State Bee-Keepers' Association will meet at 10 a.m. on Wednesday, Nov. 14, 1888, at the office of the Secretary of the State Fair (in the Fair Building), in Montgomery, Ala. Members are urged to attend, and all persons interested in bees and honey are cordially invited.

J. M. JENKINS, Sec.

Advertisements.

The American Apiculturist

WILL be mailed from Oct. 1, 1888, to Jan. 1, 1890, for 75 cents. The "Bee-Keeper's Handy-Book" will be re-written the coming year, and all will be published in THE APICULTURIST during the year 1889. The first article will be presented in the Nov., 1888, issue.

Our method for rearing QUEENS in full colonies will be published in pamphlet form, and a copy given to each subscriber. Address,

AMERICAN APICULTURIST,
42A1t WENHAM, Essex Co., MASS.

Dadants' Foundation Factory, wholesale and retail. See advertisement in another column.

WANTED,

Beeswax.—We will pay 20 cents per pound, delivered here, for Yellow Beeswax. To avoid mistakes, the name of the shipper should always be on each package.

THOS. G. NEWMAN & SON,
923 & 925 West Madison St., CHICAGO, ILLS.